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AMENDMENTS TO THE CLAIMS:

The listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF THE CLAIMS

1. (Currently Amended) A method of enabling growth of mammalian cells, which method comprises: supplying liquid comprising biologically compatible polymer to a liquid outlet in the vicinity of a surface and subjecting liquid issuing from the outlet to an electric field to cause the liquid to form polymer fibre which is attracted to and deposits onto the surface to form a polymer fibre scaffold comprising a three-dimensional continuous network of intercommunicating fibre portions having ~~fibre of~~ a given fibre diameter with gaps between adjacent fibre portions; and applying mammalian cells to the fibre scaffold, wherein the gaps between the fibre portions and the fibre diameter have a size relative to a diameter of the mammalian cells so as to facilitate at least one cell process selected from the group consisting of growth preferentially along the fibre portions, attachment to the fibre portions, elongation preferentially along the fibre portions, and differentiation ~~such that cells grow or elongate preferentially along the fibre of the fibre scaffold~~.

2. (Original) A method according to claim1, wherein the fibre diameter is comparable to or smaller than the cell diameter.

3. (Original) A method according to claim1, wherein the cell diameter is from 1 to 20 times the fibre diameter.

4. (Original) A method according to claim 1, wherein the cell diameter is from 5 to 10 times greater than the fibre diameter.

5. (Original) A method according to claim 1, wherein the cell diameter is in the range from about 2 to about 20 microns and the fibre diameter is in the range from about 1 to 2 microns.

6. (Original) A method according to claim 1, wherein the cell diameter is about 10 microns and the fibre diameter is from 1 to 2 microns.

7. (Original) A method according to claim 1, wherein the fibre diameter is from 1 to 2 microns.

8. (Original) A method according to claim 1, wherein the relative sizes of the cell and fibre diameters are such that the fibre surface appears curved to the cells.

9. (Original) A method according to claim 1, wherein the fibre diameter is of comparable size to cell surface receptors of the cells.

10. (Currently Amended) A method according to claim 1, wherein the polymer is selected from the group consisting of: a composition comprising ethyl acetate, Isopropyl alcohol, amyl acetate, isobutyl alcohol, denatured alcohol, camphor and nitrocellulose;

~~New Skin, EudragitRL100,~~ polycaprolactone~~,~~ ; polylactide (L: D isomer ratio 50: 50); and polylactide (L: D isomer ratio 96:4).

11. (Previously Amended) A method according to claim 1, wherein the cells are human adherent cells.

12. (Previously Amended) A method according to claim 1, wherein the cells are human fibroblast cells.

13. (Previously Amended) A method according to claim 1 wherein the mammalian cells include human fibroblast cells, and the polymer fibre scaffold has fibre of diameter in a range of 1 to 2 microns with gaps between adjacent fibre portions.

14. (Currently Amended) A method of facilitating at least one cell process of human fibroblast cells, which method comprises: supplying liquid comprising a biologically compatible polymer ~~selected from the group consisting of New Skin, EudragitRL100, polycaprolactone and polylactide~~ to a liquid outlet in the vicinity of a surface and subjecting liquid issuing from the outlet to an electric field to cause the liquid to form polymer fibre which is attracted to and deposits onto the surface to form a polymer fibre scaffold comprising a three-dimensional continuous network of intercommunicating fibre portions having ~~fibre of~~ a fibre diameter in a range of 1 to 2 microns with gaps between adjacent fibre portions; and applying the human fibroblast cells to the fibre scaffold, wherein the gaps between the fibre portions and the fibre diameter are such that the

human fibroblast cells grow or elongate preferentially along the fibre of the fibre scaffold, wherein the biologically compatible polymer is selected from the group consisting of: a composition comprising ethyl acetate, isopropyl alcohol, amyl acetate, isobutyl alcohol, denatured alcohol, camphor and nitrocellulose; ~~New Skin, EudragitRL100,~~ polycaprolactone~~,~~ ; and polylactide.

15. (Previously Amended) A method according to claim 20 wherein the mammalian cells comprise human bone marrow fibroblast cells, and wherein the mean fibre diameter of fibres in the polymer fibre scaffold is about 3 microns with the mean size of gaps between adjacent fibre portions of about 16 microns.

16. (Currently Amended) A method of providing an environment for facilitating differentiation of stem cells, which method comprises: supplying liquid comprising a biologically compatible polymer to a liquid outlet in the vicinity of a surface and subjecting liquid issuing from the outlet to an electric field to cause the liquid to form polymer fibre which is attracted to and deposits onto the substrate to form a polymer fibre scaffold comprising a three-dimensional continuous network of intercommunicating fibre portions having a fibre ~~of~~ diameter and a gap between fibre portions that, without addition of extrinsic biological factors, facilitate ~~facilitates~~ differentiation.

17. (Original) A method according to claim 16, further comprising applying stem cells to the fibre scaffold without addition of extrinsic biological factors.

18. (Currently Amended) A method of facilitating differentiation of osteogenic stem cells, which method comprises: supplying liquid comprising a biologically compatible polymer to a liquid outlet in the vicinity of a surface and subjecting liquid issuing from the outlet to an electric field to cause the liquid to form polymer fibre which is attracted to and deposits onto the substrate to form a polymer fibre scaffold comprising a three-dimensional continuous network of intercommunicating fibre portions having ~~fibre of~~ a fibre diameter of about 10 microns with gaps between adjacent fibre portions of about 16 microns; and applying the cells to the fibre scaffold without addition of extrinsic biological factors but wherein, after a period of time, the cells have a morphology resembling nerve cells.

19. (Previously Amended) A method according to claim 16, wherein the polymer comprises polycaprolactone.

20. (Currently Amended) A method of facilitating at least one cell process of mammalian cells, which method comprises: supplying liquid comprising a solution of a biologically compatible polymer to a liquid outlet in the vicinity of a surface and subjecting liquid issuing from the outlet to an electric field to cause the liquid to form polymer fibre which is attracted to and deposits onto the substrate to form a polymer fibre scaffold comprising a three-dimensional continuous network of intercommunicating fibre portions having ~~fibre of~~ a fibre diameter in the range from 0.2 to 100 microns and a gap size ~~with gaps~~ between adjacent fibre portions in the range from about 10 to 500 microns; and applying mammalian cells to the fibre scaffold, the fibre diameter and gap size being

such as to facilitate at least one cell process selected from the group consisting of growth preferentially along the fibre portions, attachment to the fibre portions, elongation preferentially along the fibre portions, and differentiation.

21. (Currently Amended) A method of facilitating at least one cell process of mammalian cells, which method comprises: supplying liquid comprising a biologically compatible polymer melt to a liquid outlet in the vicinity of a surface and subjecting liquid issuing from the outlet to an electric field to cause the liquid to form polymer fibre which is attracted to and deposits onto the substrate to form a polymer fibre scaffold comprising a three-dimensional continuous network of intercommunicating fibre portions having ~~fibre of~~ a fibre diameter in the range from 2 to 500 microns and a gap size ~~with gaps~~ between adjacent fibre portions in the range from about 25 to 3000 microns; and applying mammalian cells to the fibre scaffold, the fibre diameter and gap size being such as to facilitate at least one cell process selected from the group consisting of growth preferentially along the fibre portions, attachment to the fibre portions, elongation preferentially along the fibre portions, and differentiation.

22. (Currently Amended) A method according to claim 1, wherein the liquid ~~polymer formulation~~ is a polymer solution.

23. (Currently Amended) A method according to claim 1, wherein the liquid ~~polymer formulation~~ is a polymer melt.

24. (Currently Amended) A method of forming a fibre scaffold for facilitating at least one cell process of mammalian cells, which method comprises: supplying comprising biologically compatible molten or liquid polymer to a liquid outlet in the vicinity of a surface and subjecting liquid issuing from the outlet to an electric field to cause the liquid to form polymer fibre which is attracted to and deposits onto the substrate to form a polymer fibre-scaffold comprising a three-dimensional continuous network of intercommunicating fibre portions having ~~fibre of~~ a fibre diameter in the range of from 20 to 70 microns and a gap size between adjacent fibre portions in the range of 100 to 500 microns.

25. (Previously Amended) A method according to claim 24, wherein the fibre scaffold is arranged to be implanted in a mammalian body or placed on or in a wound.

26. (Currently Amended) A method according to claim 24, wherein the surface is a target area of a mammalian body ~~such as a wound~~ and the fibre scaffold is produced in situ.

27. (Previously Amended) A method according to claim 1 wherein the cells are applied by a seeding process.

28. (Previously Amended) A method according to claim 1 wherein the cells are applied by spraying.

29. (Currently Amended) A method according to claim 1 wherein applying mammalian cells to the fibre scaffold ~~which~~ comprises preparing a liquid formulation comprising cell culture medium and water and ~~suitable for enabling cells to be applied to the fibre scaffold by~~ subjecting the liquid formulation to an electric field to cause the liquid to break up into droplets which deposit onto the fibre scaffold., ~~which comprises formulating cell culture medium with a water soluble polymer.~~

30. (Previously Amended) A method according to claim 1 which comprises applying the cells to the fibre scaffold by subjecting a liquid formulation comprising cell culture medium carrying the cells and a water soluble polymer to an electric field to cause the liquid to break up into droplets or to form at least one fibre.

31. – 34. (Cancelled)

35. (Previously Amended) A method according to claim 1 wherein the fibre gap is greater than approximately half the cell diameter.

36. (Previously Amended) A method according to claim 1 wherein the fibre diameter is less than the fibre gap.

37. – 48. (Cancelled)

49. (Currently Amemded) A method according to claim 1, wherein the surface is a target

area of a mammalian body ~~such as a wound~~ and the fibre scaffold is produced in situ.

50. (Previously Presented) A method according to claim 16, wherein the cells are applied by a seeding process.

51. (Previously Presented) A method according to claim 16, wherein the cells are applied by spraying.

52. (New) A method according to claim 26, wherein the target is a wound.

53. (New) A method according to claim 49, wherein the target is a wound.